

ENVIRONMENT, SC and TECH, and CURRENT AFFAIRS**ENVIRONMENT**

1. With reference to 'Agenda 21', sometimes seen in the news, consider the following statements :
 1. It is a global action plan for sustainable development.
 2. It originated in the World Summit on Sustainable Development held in Johannesburg in 2002.Which of the statements given above is/ are correct?
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) None of the above
2. Proper design and effective implementation of UN-REDD+ Programme can significantly contribute to
 1. protection of biodiversity
 2. resilience of forest ecosystems
 3. poverty reductionChoose the correct statement(s):
(a) 1 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) 1,2 and 3
3. Consider the following statements:
 1. Coal ash contains arsenic, lead and mercury.
 2. Coal-fired power plants release sulphur dioxide and oxides of nitrogen into the environment.
 3. High ash content is observed in Indian coal.Choose the incorrect statement(s)
(a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) All of the above
4. Emissions Gap Report 2021 was recently released by:
(a) WMO
(b) UNEP
(c) IPCC
(d) IMD
5. Consider following statements:
 1. The "ecological footprint" is a measure of on earth ecosystems.
 2. The carbon footprint is is 84% of the ecological footprint.Select the correct answer using the code given below:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
6. Consider following statements regarding IPCC:
 1. It is an inter-governmental organization created by WMO, IMD and UNEP.
 2. India is not a member.Select the correct answer using the codes given below:
(a) 1 only

- (b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
7. Glaciers of the Himalayas: Climate Change, Black Carbon, and Regional Resilience is released by which of the following organization?
(a) UNEP
(b) WMO
(c) WEF
(d) WMO
8. Consider the following statements with reference to International Solar Alliance (ISA):
1. It was launched at Paris Climate Change Conference in 2015.
2. The USA is not a member of ISA.
3. UN General Assembly (UNGA) confers Observer Status on the International Solar Alliance (ISA).

Which of the statements given above is/are correct?

- (a) 1 and 3 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) All of the above
9. Consider following statements regarding Global Tiger Day:
1. International Tiger Day is celebrated annually on July 29.
2. The theme for this year International Tiger Day is- "Their Survival is in our hands".
Select the correct answer using the codes given below:

- (a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
10. Consider the following statements with reference to the IUCN:
1. It is the world's oldest global environmental organization.
2. It is headquartered at Geneva, Switzerland.
3. India is a member of IUCN

Which of the statements given above is/are correct?

- (a) 1 and 2 only
(b) 2 and 3 only
(c) 1 and 3 only
(d) All of the above

SCIENCE AND TECHNOLOGY

11. Consider following statements:
1. LiFi transmits data using light with the help of LED bulbs.
2. WiFi transmits data using electro-magnetic waves with the help of WiFi router.
Choose the correct code:
(a) 1 only
(b) 2 only
(c) Both 1 and 2
(d) Neither 1 nor 2
12. A recent study ranked India among top 5 countries in terms of interest in metaverse projects.
Consider following statements regarding Metaverse:
1. Metaverse can be understood as a combination of multiple elements of technology, including

virtual reality, augmented reality and video where users "live" within a digitally enhanced surrounding.

2. Metaverse has 7 layers.

Choose the incorrect code:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2**

13. Consider following statements regarding IndiGau:

- 1. It is India's first Cattle portal for the conservation of pure varieties of indigenous cattle breeds.
- 2. It was developed by the National Institute of Animal Biotechnology (Hyderabad).

Choose the correct code:

- (a) 1 only
- (b) 2 only**
- (c) Both 1 and 2
- (d) Neither 1 nor 2

14. Recently, the James Webb Space Telescope, NASA's most powerful telescope, is rocketed into orbit. Consider following statements regarding the James Webb Space Telescope:

- 1. It is NASA's infrared flagship observatory.
- 2. It is an international collaboration between NASA, the European Space Agency (ESA), and the Canadian Space Agency (CSA).

Choose the correct code:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

15. NASA's Parker Mission is related to:

- (a) Venus
- (b) Black hole
- (c) Mars

(d) Solar

16. Consider the following statements about Assisted Reproductive Technology:

- 1. In India, at present, the statute allows obtaining gametes from any person who has attained 18 years of age and is married.
- 2. In India, the gamete of a single donor can be given to more than one commissioning couple but the donor will not have any parental rights over the child.
- 3. In assistive reproductive technology, human embryos can be grown inside animals also.

Which of the statements given above is/are correct?

- (a) 1 and 2
- (b) 2 only
- (c) 1, 2 and 3
- (d) 3 only**

17. Consider the following statements about an Indian satellite

- 1. It provides cloud penetration and day-night imaging capability
- 2. It can be used for paddy monitoring in Kharif season and management of natural disasters
- 3. It is the first all weather satellite system in India

Which of the following satellite systems of India has the foresaid capabilities?

- (a) Cartosat
- (b) HySIS
- (c) GISAT

(d) RISAT

18. Which of the following statements is not correct about Quantum computers?

- (a) **Quantum computers are larger in size than supercomputers**
- (b) Quantum computers require less energy than super computers
- (c) Quantum algorithms can use superposition, interference, and entanglement to perform calculations
- (d) Quantum bits (Qubits) can be in the state of 1 and 0 simultaneously

19. 3D-printing can be used for which of the following?

- 1. Preparation of cakes and biscuits.
- 2. Making robotic prosthetic limbs.
- 3. Manufacturing automotive parts.
- 4. Reconstructive surgeries.
- 5. Data processing technologies.

Select the correct answer using the code given below:

- (a) 2, 3 and 4 only
- (b) 2, 3 and 5 only
- (c) 1, 2, 3 and 4 only

(d) 1, 2, 3, 4 and 5

20. Which of the following are the gene editing technologies?

- 1. Prime Editing
- 2. CRISPR-Cas9
- 3. Mega nucleases

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 1 and 3 only
- (c) 2 and 3 only

(d) 1, 2 and 3

CURRENT AFFAIRS

21. Consider the following statements with reference to the International Law Commission:

- 1. It aims to encourage the progressive development of international law and its codification.
- 2. The members of the Commission are to be elected by the UN General Assembly from a list of candidates nominated by member countries.

Which of the statements given above is/are correct?

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2**
- (d) Neither 1 nor 2

22. Which of the following pairs are correctly matched?

List I	List II
<u>Border Line</u>	<u>Bordering country to India</u>
1. McMahon Line	Tibet and the North-East India
2. Radcliffe Line	India and Bangladesh
3. Durand Line	India and Afghanistan

Select the correct answer using the code given below:

- (a) 1 and 2 only
- (b) 2 and 3 only
- (c) 1 and 3 only
- (d) All of the above**

23. Which among the following are the members of the New Development Bank?

- 1. Bangladesh
- 2. United Arab Emirates

3. Uruguay
4. Egypt
5. Maldives

Select the correct answer using the code given below:

- (a) 2 and 5 only
- (b) 1,3 and 4 only
- (c) 1,2,3 and 4 only**
- (d) All of the above

24. Arrange the following commodities in descending order according to their share in India's total export as per Financial Year 2021.

1. Petroleum products
2. Electric Machinery and equipment
3. Iron and Steel
4. Pearl, Precious and semiprecious stones

Select the correct answer from the code given below:

- (a) 4-1-3-2
- (b) 1-4-2-3
- (c) 1-4-3-2**
- (d) 4-1-2-3

25. Consider following statements regarding Sela Macaque monkey:

1. A new species of monkey recorded from Arunachal Pradesh has been named after Sela Pass
2. It is geographically separated from the Arunachal Macaque of Tawang district by Sela.

Choose the incorrect code:

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2**

